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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,168	04/19/2006	Nobuyuki Miroku	9694-000041/US/NP	7347
52800	7590	06/14/2007		
GREGORY A. STOBBS 5445 CORPORATE DRIVE SUITE 400 TROY, MI 48098			EXAMINER KAYRISH, MATTHEW	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/576,168

Applicant(s)

MIROKU ET AL.

Examiner

Matthew G. Kayrish

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim1 is rejected under 35 U.S.C. 102(b) as being anticipated by Matsuo et al (US Patent Number 6587412).

Regarding claim 1, Matsuo discloses:

A disk apparatus comprising:

A stationary frame as a stationary side (figure 1, item 5); and

A floating unit (figure 2, items 3 & 4), which is disposed in said stationary frame through elastic component (figure 2 below), and which has a function to record data on and/or reproduce the data from a disk-shaped recording medium inserted into said disk apparatus (column 8, lines 25-39);

Wherein said floating unit includes:

A disk-carrying means (figure 2, item 4), which carries said disk-shaped recording medium inserted from a disk insertion/extraction port (column 8, item 48) formed on said stationary frame (figure 1, item "IN");

A disk-clamping means (figure 2, item 3a), which clamps said disk-shaped recording medium at a recording/reproducing position (column 9, lines 3-10);

A disk recording/reproducing-driving means (figure 2, item 4b), which rotates said disk-shaped recording medium to record the data on or reproduce the data from said disk-shaped recording medium (column 9, lines 3-9);

An electric circuit board (column 13, lines 35-36) having an electric circuit which controls the driving of said disk-carrying means, said disk-clamping means and said disk recording/reproducing driving means (column 13, lines 37-44); and

Disk insertion-detecting levers (figures 3A & 3B, items 1b & 2b) which are disposed in the proximity of said disk insertion/extraction port (figure 1), and which are pressed down and rotated by the outer edge of said inserted disk-shaped recording medium (figures 3A & 3B display rotation by outer edge of "DS"), so as to directly drive a switch which outputs a disk detection signal to said electric circuit (column 11, lines 35-54).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuo et al, in view of Shimizu et al (US Patent Number 6854124).

Regarding claim 2, Matsuo discloses the features of base claim 1, as stated in the 102 rejection above, and further disclosing:

Wherein said disk insertion-detecting levers are disposed in the proximity of both sides of said disk insertion/extraction port (figure 1, switches and levers are laterally disposed above the slot).

Matsuo fails to specifically disclose:

Wherein each of said disk insertion-detecting levers has a blade-shaped part which is spread to both sides and is a little raised at its both ends, and a projection which presses the switch of said electric circuit board, when said disk insertion-detecting lever is rotated.

Shimizu discloses:

Wherein each of said disk insertion-detecting levers has a blade-shaped part (figure 4, items 52a & 52b) which is spread to both sides and is a little raised at its both ends (figure 4, items 52a & 52b have blades and are raised), and a projection which presses the switch of said electric circuit board (figure 4, item 50), when said disk insertion-detecting lever is rotated (column 5, lines 22-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the drive of Matsuo with a blade portion of the rotation lever to directly trigger the switches, as taught by Shimizu, because the switches can provide information above the insertion or ejection of the disk, as stated in column 5, lines 22-45.

Regarding claim 3, Matsuo and Shimizu disclose the features of base claims 1 or 2, as stated in the 102 and 103 rejections above, and Shimizu further disclosing:

Wherein an ejection-detecting lever (figure 4, item 52b) is disposed in the proximity of said disk insertion-detecting lever (figure 4, item 52a), and is pressed down and rotated by the outer edge of said disk-shaped recording medium, so as to output, to said electric circuit, a signal which indicates the detection of the ejection of said disk-shaped recording medium (column 5, lines 22-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the ejection detection lever in the proximity of the insertion detection lever, as taught by Shimizu, because then the insertion or the detection can be detected based on the position of the disc and the switch sequence which is pressed, as stated in column 5, lines 22-45.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Kayrish whose telephone number is 571-272-4220. The examiner can normally be reached on 8am - 5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

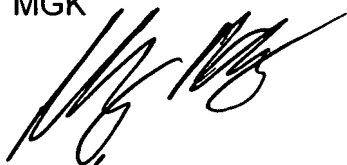
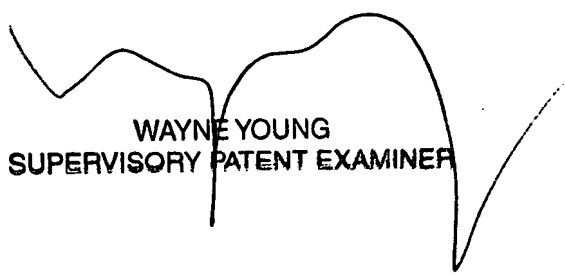
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew G. Kayrish

6/11/2007

MGK

  
6/11/07  
WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER